2017 MSCVE Annual Report

State of Alaska

Division of Measurement Standards and Commercial Vehicle Enforcement,
Department of Transportation and Public Facilities

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Letter from the Director of MSCVE, Daniel V. Smith

November 21, 2018

As the Director of the Department of Transportation and Public Facilities, Division of Measurement Standards and Commercial Vehicle Enforcement (DOT&PF, MSCVE), it is my pleasure to present the 2017 MSCVE Annual Report. In the following pages you will see ways that MSCVE leverages resources and maximizes efforts to support our mission to enhance motoring public safety, preserve public infrastructure, and assure marketplace confidence and equitable trade. Our success would not be possible without the outstanding cooperation of our government and industry partners, and the professionalism of Department personnel who are entrusted with the responsibility to promote safety and market confidence on a daily basis. MSCVE consists of two sections: Measurement Standards and Commercial Vehicle Enforcement.

Measurement Standards (MS) team members work to ensure a level playing field for the residents and businesses operating in the State of Alaska. Weights & Measures Inspectors provide testing and inspection of all weighing and measuring devices used in commerce. Dedicated team members not only enforce statutes and regulations, but provide education to device owners. Measurement inaccuracy can cause financial hardship to residents and businesses alike.

The **Commercial Vehicle Enforcement** (CVE) goal is to reduce the number of commercial motor vehicle related crashes and fatalities in Alaska. A transportation system that is safe, reliable, and efficient provides a foundation for economic prosperity. Cargo carrying commercial motor vehicles (CMVs) deliver everything from food, fuel, and clothing to automobiles and mined ore. Passenger carrying CMVs (motor coaches) provide passenger services throughout the State vital to the tourism industry and the Alaskans' that want to go to work, school, or play. CVE efforts in the coming year include: educational training to carriers and drivers, size and weight enforcement, and removing unsafe cargo and passenger carrying CMVs, and unqualified drivers from the road.

The **Commercial Vehicle Customer Service Center** analyzes routes and conducts load calculations to ensure safe routes that preserve State infrastructure when movements require oversize and overweight permits. In an effort to protect State roads and bridges, weight restrictions are used to decrease the deterioration of the transportation system. Future enhancements to the on-line permitting system will allow near real-time permit generation for overweight loads upwards of 125%.

We will continue to focus our efforts to preserve public infrastructure, enhance safety of the motoring public, and assure marketplace confidence and equitable trade for all of Alaska. Please explore the MSCVE website and allow us to share our accomplishments and plans for the future.

Drive Safely,

Daniel V. Smith, Director

Mission Statement

"Ensuring Accurate Trade Measurements and Enforcing Commercial Vehicle Regulations."

Table of Contents

Executive Summary

The purpose of this annual report is to provide information and heighten awareness of the efforts of the State of Alaska, Department of Transportation and Public Facilities (DOT&PF), Division of Measurement Standards and Commercial Vehicle Enforcement (MSCVE).

In July 1997, the State of Alaska DOT&PF became the Lead Agency for commercial motor vehicle safety. An executive order created the Division of MSCVE by combining staff, functions, and responsibilities of groups formerly in the Alaska Departments of Commerce, Public Safety, and Transportation and Public Facilities.

The Division consists of two sections: Measurement Standards (MS) and Commercial Vehicle Enforcement (CVE). MS is responsible for the annual inspection of weighing and measuring devices that are used in any form of commerce and trade. CVE is responsible for commercial motor vehicle safety, size and weight enforcement, and issuing oversize and overweight permits, in addition to the enforcement of federal commercial motor carrier safety regulations. Information in this report is provided in state fiscal, federal fiscal, or calendar year depending on the program reporting period.

Year	Period
Federal Fiscal Year 2017 (FY2017)	October 1, 2016 – September 30, 2017
State Fiscal Year 2017 (SFY2017)	July 1, 2016 – June 30, 2017
Calendar Year 2017 (CY2017)	January 1, 2017 – December 31, 2017

Measurement Standards

Measurement Standards (MS) uses multiple approaches of enforcement and regulatory compliance to ensure accurate trade measurements in the market place. These approaches include:

- Checking prepackaged products and commodities to assure accurate net contents
- Inspection and testing of weighing and measuring equipment used in commerce
- Investigating consumer complaints and working toward willful compliance
- Providing educational outreach to device owners and consumers

There were 14,493 weights and measures device inspections conducted during SFY2017, compared to 18,437 inspections conducted in SFY2016.

The photograph to the right highlights a new addition to the MS equipment fleet. This is a trailer-mounted liquid petroleum gas (LPG) calibration unit. It simplifies the calibration of LPG dispensing equipment and provides calibration traceable to National Institutes of Standards Technology (NIST) standards.

Trailer mounted Seraphin LPG calibration unit

Inspectors sampled 6,500 items to determine pricing accuracy and took enforcement actions on 45 price overcharges to consumers. Consumer complaints relating to price inaccuracies and fuel pump issues are the most frequently received from the public.

Commercial Vehicle Enforcement

CVE uses multiple avenues to enhance motoring safety and preserve State infrastructure. These include:

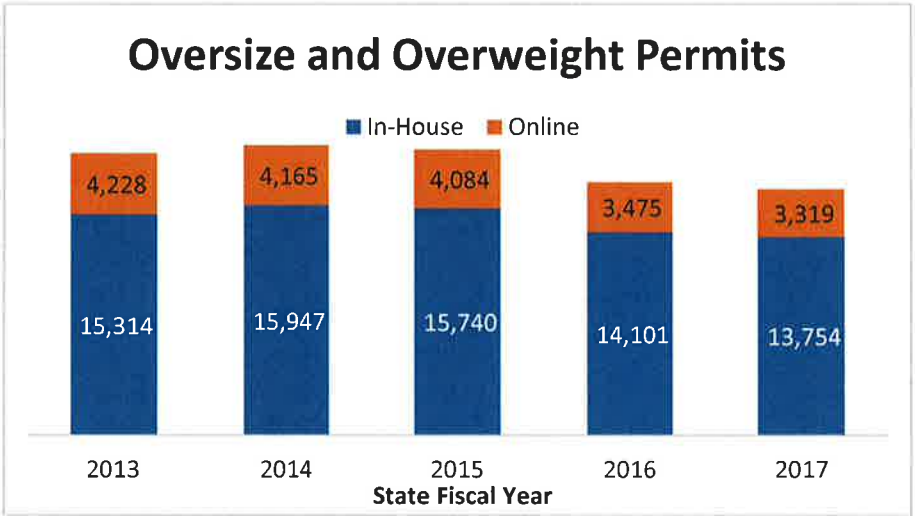
- Conducting commercial motor vehicle (CMV) safety, size, and weight inspections
- Continuing enforcement and training partnerships with local, state, and federal law enforcement agencies
- Educating property and passenger carriers that operate in Alaska
- Educating hazardous materials carriers that operate in Alaska
- Issuing oversize and overweight permits to the motoring public

CVE's primary activities are to conduct safety inspections, size and weight compliance checks on all vehicles, especially those engaged in commerce, and to ensure proper permitting of all vehicles operating in Alaska. To the right is a properly permitted load, the fuselage of a plane that was purportedly used in the Bay of Pigs Invasion. Commercial vehicle and driver inspections serve to reduce the severity of CMV-related crashes by removing unsafe vehicles and unqualified drivers from the road. A total of 1,029 unsafe vehicles and 184 unqualified drivers were removed from the road during FY2017. In FY2017, a total of 8,527 inspections were conducted by Commercial Vehicle Enforcement Officers (CVEOs). CVEOs documented 8,978 safety violations, which include: 7,205 vehicle, 1,669 driver, and 104 Hazardous Material (HazMat) safety violations.

The purpose of weighing CMVs on Alaskan roads is to ensure the safety of the motoring public and the preservation of infrastructure. CMVs that are not weight compliant contribute to the premature deterioration of Alaska's roads and bridges. Inspection efforts focus on maintaining a high level of CMV weight compliance at fixed inspection/weigh stations and roadside inspection stations away from fixed facilities. In FY2017, a total of 64,097 CMVs were weighed for compliance at weigh stations throughout Alaska; an additional 255 vehicles were weighed during roadside weight inspections. There were 732 unpermitted overweight trucks discovered, 282 of which received a written citation. The SFY2017 weight compliance rate was 98.8%. Continued size and weight enforcement throughout Alaska is expected to increase weight compliance in FY2018.

The State of Alaska operated and maintained nine fixed facilities where safety inspections were conducted. The State also maintains eight fixed weigh-in-motion (WIM) sites for monitoring traffic flows. Using the data provided by the WIMs, MSCVE was able to focus efforts in locations of high traffic volumes.

Oversize and overweight vehicles without a permit can be a safety hazard to the motoring public and could possibly damage infrastructure. The Commercial Vehicle Customer Service Center (CVCSC) analyzes routes to process permits that ensure safe routes that preserve the State's infrastructure when movements require oversize and overweight permits. The CVCSC produced 17,073 oversize and overweight permits in SFY2017; an additional 9,598 temporary truck/trailer registration permits were processed. The total number of oversize and overweight permits issued has remained roughly constant between SFY2013 and SFY2015 with a slight decrease in SFY2016 and SFY2017 (see graph below).



CVEO Alex Ymbert-Rosario with Commissioner Marc Luiken

Employee Recognition

During CY2017, the officers and staff of MSCVE had an exemplary year. Several individuals and groups were recognized for their excellence during the year. The CVEOs received the Team Award after an impressive year which included 55 deployments and 8,527 inspections. The Permit Team Lead, Jennifer Gray, received the Employee of the Year Award. Officer Alex Ymbert-Rosario (left) received the Extra Mile Award for surpassing expectations and exemplary public service.

Financial Position

MSCVE leverages a combination of funding from the State of Alaska and the Federal Government. During SFY2017, MSCVE spent approximately $6,591,107.

- $1,061,600 – General Funds (UGF)
- $2,764,400 – General Funds – Program Receipts (DGF)
- $483,300 – Unified Carrier Registration Receipts
- $8,807 – Interagency Receipts (RSAs)
- $249,800 – ICAP-Operating
- $1,933,920 – Grant Funds – MSCVE PS & Support Lines
- $83,864 – Grant Funds – ISSD PS
- $3,738 – State Capital Projects
- $1,678 – ICAP Projects (IT Infrastructure)

MSCVE relies on state funding to leverage federal grant funding. Federal funding supports a portion of enforcement personnel, supplies, equipment, technology, research, and performance-based brake testers.

Future Challenges

Measurement Standards (MS) will need effective management of personnel to meet statutory requirements. All registered scales, meters, and scanners are required to be tested annually per AS 45.75.080 – General Testing. The anticipated challenges are performing inspections and ensuring compliance on all weighing and measuring devices throughout the state. These inspections ensure accurate trade measurements for wholesalers, retailers, and Alaskans who purchase items based on weight, volume, or measure.

Weights & Measures Inspectors operate out of Anchorage and Juneau, and also travel to outlying areas in order to serve the entire state. Inspectors require specialized tools and training to keep up with technological advances in measuring as it relates to device design, applications, and inspections. MS works closely with the National Conference on Weights and Measures (NCWM) to provide a Professional Development Program that encourages employee retention. Recent updates to regulations have required additional NIST training for "Price Verification" testing methods and procedures used by Weights & Measures staff.

Marijuana dispensaries are growing around the state. These dispensaries have led to an increase in the responsibility of Measurement Standard's mission. A rigorous testing program of the scales used in these businesses, as with all measurement devices used in commerce, requires a robust and comprehensive MS presence to protect both consumers and the interests of the state. This presence necessitates MS to play an active role in promoting fairness and assisting new business growth.

CVE is designated as the lead Motor Carrier Safety Assistance Program (MCSAP) agency. CMV safety inspections in urban and rural locations reduce CMV crashes, fatalities, and injuries. According to five years of data, approximately 80% of permits are processed by in-house staff as opposed to online.

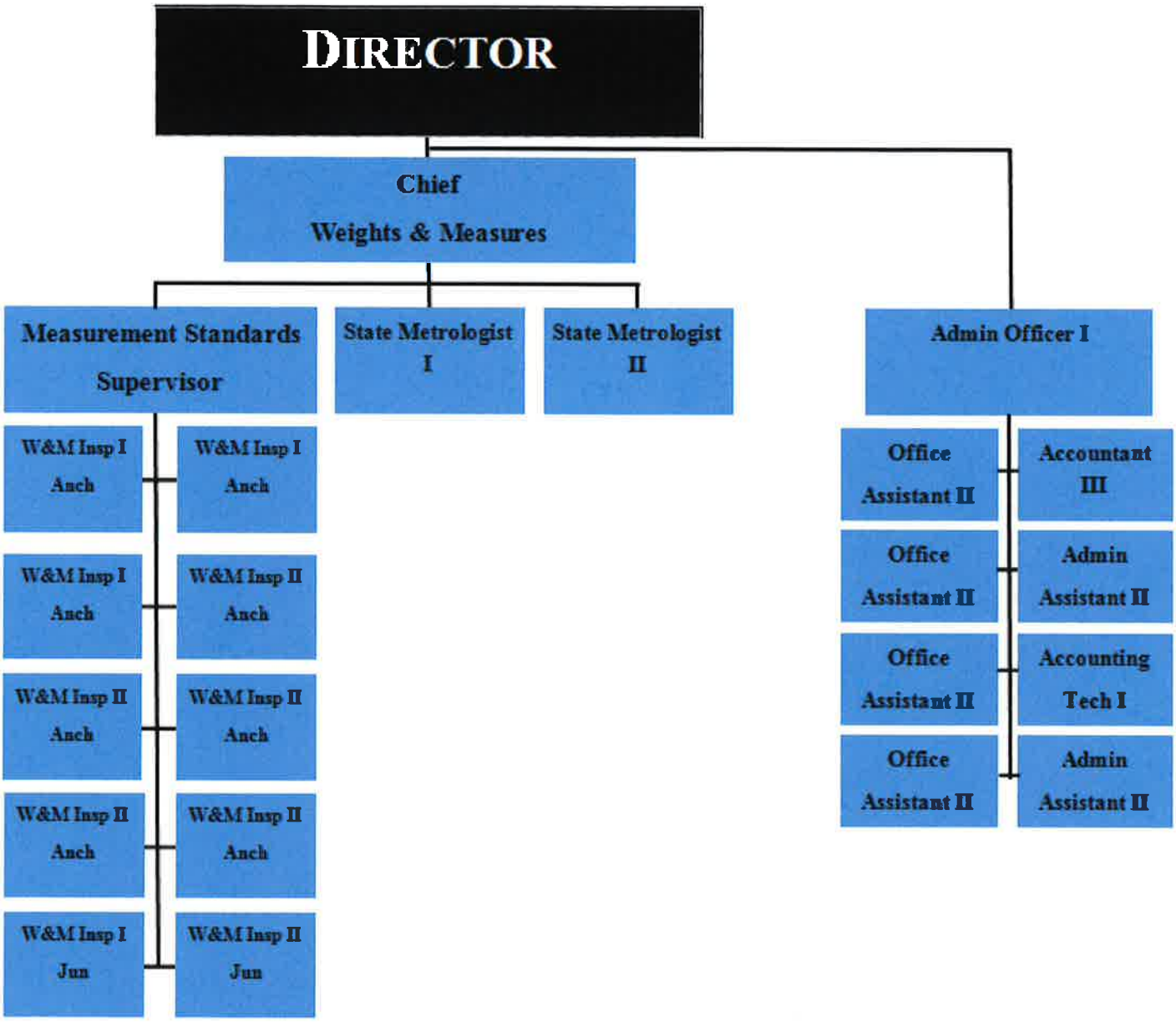
The Fixing America's Surface Transportation Act, or FAST Act, was signed into law by the President of the United States on December 4, 2015. This act funds surface transportation programs through 2020 and further consolidates federal transportation grants. While the FAST Act ensures funding availability, there is still uncertainty surrounding the grant consolidation and multi-year applications, which creates challenges when attempting to perform long-term strategic planning.

This annual report is distributed to stakeholders, interested parties, and is available for download at:

www.dot.alaska.gov/mscve

Measurement Standards

Measurement Standards – Section Organizational Chart



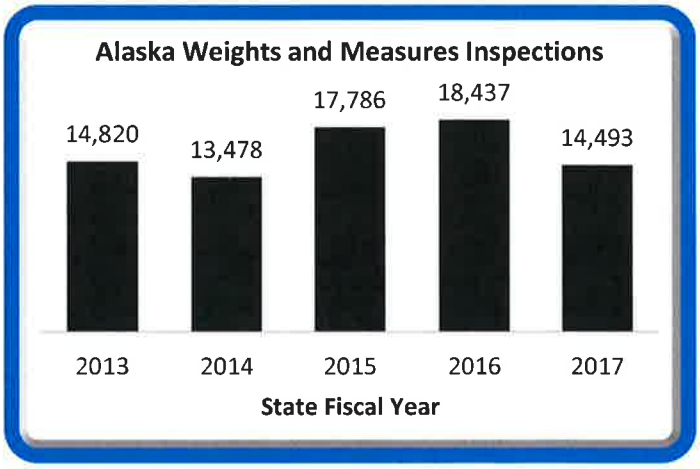
As of February 12, 2018

Measurement Standards – Inspections and Testing

The goal of Measurement Standards (MS) is to assure marketplace confidence and equitable trade with the objective of safeguarding the public and industry in matters involving commercial determinations of quantity. Inspection and testing procedures are designed to ensure the accuracy of all transactions when merchandise is bought or sold by weight, measure, or count, and to eliminate the potential for fraud, carelessness, and misrepresentations during these transactions. For example, an improperly calibrated gasoline retail dispenser could be overcharging customers for fuel.

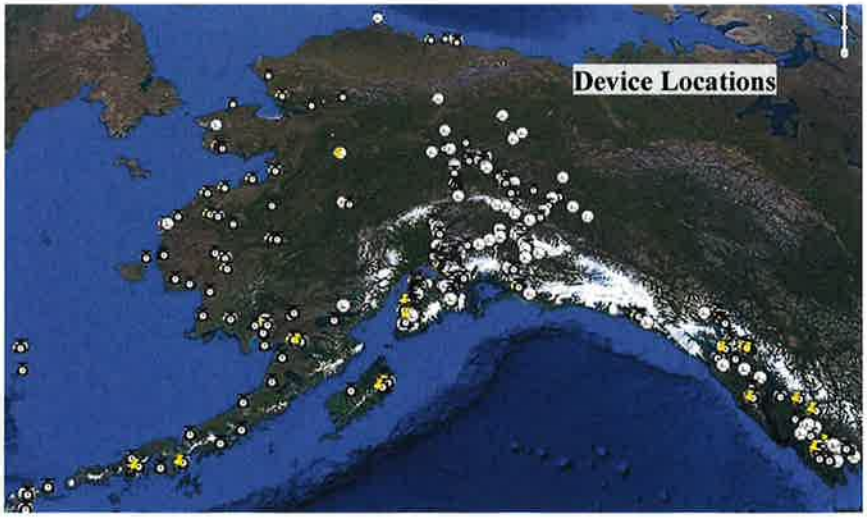
Weights & Measures Inspector Justin Zimin demonstrating testing a scale at the 2017 MSCVE Open House.

Activities performed in pursuit of this goal include the testing of commercial scales and meters. Additionally, inspectors perform price verification evaluations and check the accuracy of advertised net content labeling. Emphasis has been placed on testing weight and measurement devices annually, increasing large fuel meter inspections, and improving inspector productivity.



Device Inspections

There were 14,493 weights and measures device inspections conducted during SFY2017, to include 12,296 unique devices. This is a decrease from the 18,437 inspections conducted in SFY2016. Of these 14,493 devices, 29% were retail liquid measuring devices (fuel pumps), 20% were fish scales used to weigh 1,001-5,000 pounds, 18% were small scales used to weigh up to 50 pounds, and the remaining 33% were an assortment of other devices. Statewide there are 17,562 active devices, some of which are inspected multiple times to bring them into compliance if they don't pass the initial test. Under AS 45.75.080 at least annually, all weighing and measuring devices used in commerce must be tested and inspected. As seen to the left, these devices are scattered all across Alaska, with the greatest concentrations along the highway system and in Southeast.



Package Testing Program

The package testing program protects consumers from purchasing weighed products that have less than the amount stated (e.g. a box of king crab legs is labeled 20 pounds. The actual weight is 18 pounds. Assuming the price is $20 per pound; the consumer was overcharged by $40). Products that are mislabeled have negative financial impacts on retailers and consumers. The package testing program has improved with the purchase of new tools and staff training which have allowed for higher levels of testing. An evaluation of the national handbooks used to conduct legal product testing was undertaken by our staff and recommendations to adopt the latest versions have been accepted. MS continually monitors changes that might affect regulations.

Crab mislabeled as extra lean ground beef.

Focus on the Future

Industry compliance with statutes and regulations is directly dependent on the frequency of inspections and the presence of Weights & Measures Inspectors. Frequent testing ensures accurate trade measurements for wholesalers, retailers, and all Alaskans who purchase items based on weight, volume, or measure. MS continues to assist businesses with legal packaging and labeling requirements for products intended to be sold in the national or international market.

MS works to reduce cost of traveling to communities to conduct inspections, including those which are accessible only by air and/or ferry. One example of this is the investment in additional test weights and measures which are located in specific communities around the state; having this equipment already in the field eliminates the additional cost of repeatedly shipping it and, therefore, lowers the cost of inspections. MS works with device owners to conduct weight and measure inspections in support of remote road and airport construction projects.

MS is continually broadening the scope of their inspection capabilities. In CY2016, a liquefied petroleum gas (LPG) prover was purchased by the Division. This prover will allow the Division to verify the accuracy of retail LPG dispensers, primarily propane meters. Regulatory updates were initiated in late 2017 to include LPG activities. The Metrology Lab also plans to add Thermometry and higher level mass calibrations to its capabilities in the near future.

The marijuana industry continues to grow and has become a reliable source of income to the state with the collection of tax revenue in the millions of dollars monthly. The value of the tax collected is entirely reliant on scales used to calculate the weight of product sold by cultivators. These scales are tested and certified by state Weights & Measures Inspectors annually. Over the last year, the number of scales used in this industry has increased by 90 devices to a total of 415 statewide. This steady upward trend has not slowed since the inception of legal marijuana for Alaska. Weights & Measures has been instrumental in helping these new businesses comply with marijuana regulations and state laws. This is one area of steady growth and, with no end in sight, it is assured that the number of inspections associated with compliance, oversight and consumer protection will increase over time.

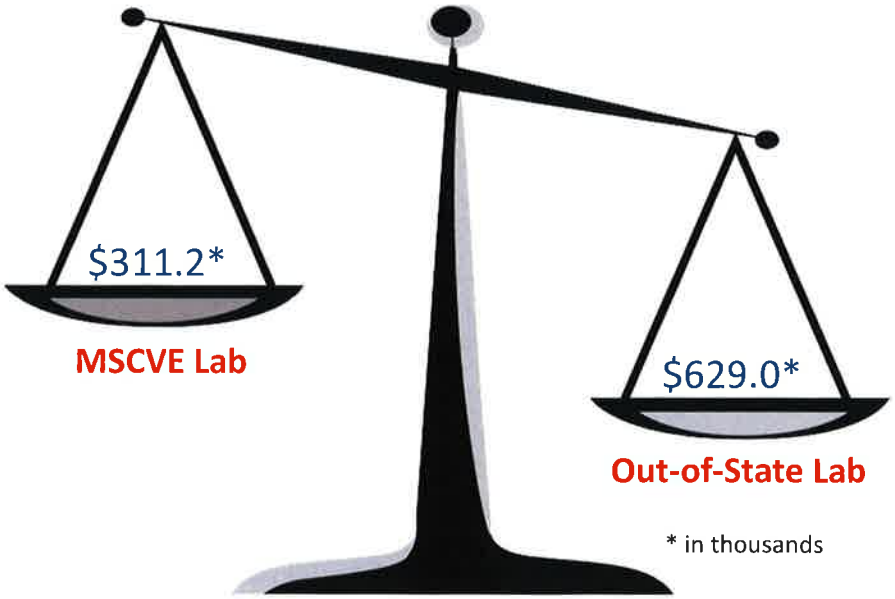
Measurement Standards – Metrology Laboratory

Metrology is defined as the science and practice of precision measurement, and is a prerequisite aspect of weights and measures regulation. Although this function is relatively low in profile, the Metrology Laboratory provides the critical link that allows the Division to assure confidence in measurements made within the state, particularly in regard to commerce and law enforcement. The Metrology Laboratory provides calibration and certification for the standards used by Weights & Measures Inspectors. This includes mass standards to 1,000 pounds, volumetric provers to 1,000 gallons, speed detection devices, and portable weight enforcement scales. All calibrated equipment is traceable to national standards. In the image to the left a Metrologist is calibrating a test measure with the state five gallon volume standard.

Above: State Metrologist Roger Holland calibrating a five gallon neck type prover using the NIST traceable slicker.

The laboratory provides test results for measuring devices of mass, volume, and frequency. Examples of these devices include calibration of speed detection equipment, portable wheel load weighers, stainless steel and cast iron test weights, and various sizes of volumetric provers. The primary customers of the laboratory are the Weights & Measures Inspectors, but services are also provided to local law enforcement agencies, scale service companies, fuel distribution and support organizations, medical service companies, and the military. A person who submits a weighing and measuring device for registration may incur a nominal fee, as set by 17 AAC 90.920. – Device Registration Fees.

The State of Alaska Metrology Laboratory is the only recognized/accredited facility in the state that performs calibrations required for both Measurement Standards and industry. A state run metrology lab "*Keeps Alaska Moving*" by reducing downtime and increasing productivity. The figure below shows the value of local metrology services by comparing what these services would cost at an out-of-state lab versus in-state at the MSCVE lab.



The State Metrology Laboratory is one of 24 state laboratories in the United States operating under a two-year recognition from the National Institute of Standards and Technology (NIST), and was recently granted another two-year recognition for 2018 and 2019. The State Metrology Laboratory is one of only 19 state laboratories accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). Meeting criteria established in International Standards Organization (ISO) 17025, and assessed by a third party assessment body, NVLAP allows the State of Alaska Metrology Laboratory to be recognized as meeting globally accepted standards of excellence.

Measurement Standards – Information and Contacts

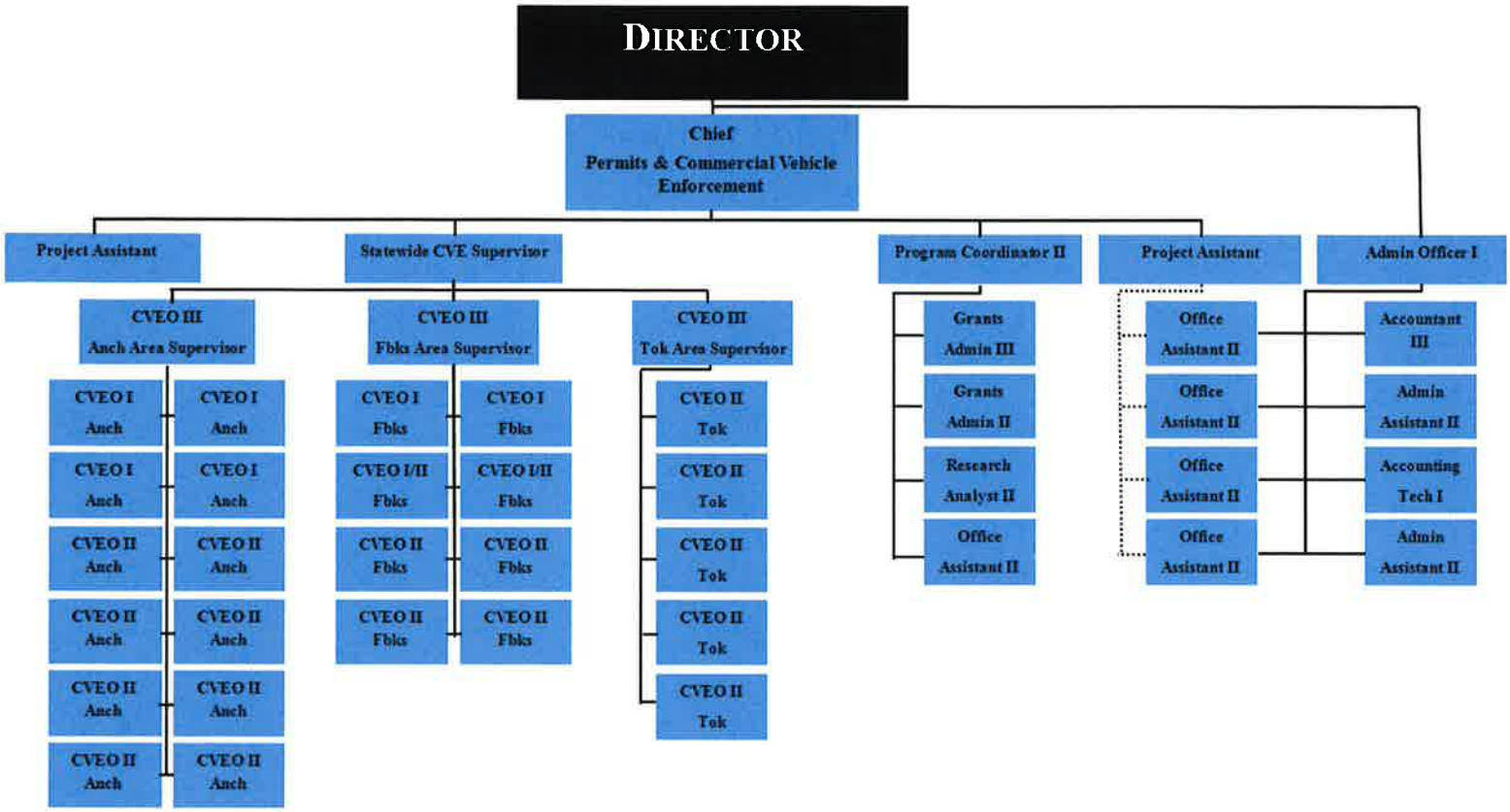
The MSCVE web site is designed to be a "One-Stop" portal to access information about the Measurement Standards section, get answers to questions and present concerns. On this website, the public can obtain contacts, file a complaint, or register a device for testing.

http://dot.alaska.gov/mscve/index.cfm?go=mscve.wm

City	*Name*	*Title*	*Phone*	*Fax*	*Email*
Anchorage	Don Brewer	Chief, Weights & Measures	907-365-1210	907-365-2313	donald.brewer@alaska.gov
Anchorage	Ray Woolfolk	Measurement Standards Supervisor	907-365-1240	907-365-2313	ray.woolfolk@alaska.gov
Anchorage	Gary Brown	Metrologist II	907-365-1233	907-365-2313	garret.brown@alaska.gov
Juneau	Marty Holmberg	Inspector II	907-789-9763		marty.holmberg@alaska.gov
Fairbanks Office			907-451-3134		

Commercial Vehicle Enforcement

Commercial Vehicle Enforcement – Section Organizational Chart

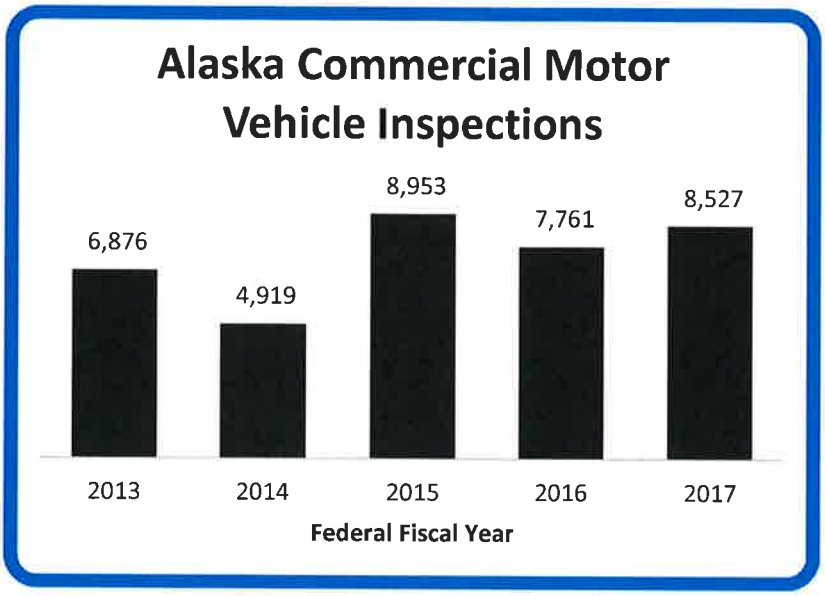


As of February 12, 2018

Commercial Vehicle Enforcement – Inspection Program

History of the CMV Inspection Program

The State of Alaska began participation in the Federal Motor Carrier Safety Assistance Program (MCSAP) in 1988 with a $25,000 grant. In 1989, the U.S. Department of Transportation (USDOT), Federal Motor Carrier Safety Administration (FMCSA) awarded a $125,000 grant, and four inspectors were hired in July, 1990. The new inspection program was administered by the Department of Public Safety and consisted of four inspectors, two Alaska State Troopers, and one clerk. During FY1993, 631 inspections were conducted. With the creation of the Division in 1997, MSCVE became the Lead Agency size and weight and oversize/overweight permitting. During FY2017, a total of 8,527 safety inspections were conducted on CMVs, as seen in the figure to the right.



Activities

MSCVE uses multiple approaches for enforcement and to ensure regulation compliance. Inspections are conducted at fixed inspection/weigh stations, roadside pull-outs, during traffic stops, and at terminal locations. Terminal inspections provide additional safety benefits for industry and training for MSCVE personnel. MSCVE has partnered with the Alaska State Troopers and a police department to remove impaired CMV drivers and unsafe vehicles from the highways with ongoing and effective enforcement initiatives. The Division's inspection program supports DOT&PF's Results Based Alignment (RBA) Core and Direct Services through "Vehicle Management," found under "Preserve Alaska's Transportation Infrastructure." To ensure maximum operational effectiveness and efficiency, MSCVE has dedicated resources to support the following safety programs (national program elements defined in 49 CFR 350.109):

- Conduct Driver and Vehicle Safety Inspections
- Outreach and Education
- Data Collection

A Commercial Vehicle Enforcement Officer testing the brakes on a CMV using the Performance Based Brake Tester (PBBT)

MSCVE is funded through a combination of sources: State of Alaska appropriations, Unified Carrier Registration (UCR) receipts, and Federal Government grants. Safety programs supported by federal and state funds include:

Unified Carrier Registration (UCR)

The Unified Carrier Registration (UCR) program is used to register operators of CMVs who conduct interstate and international commerce. It was created by federal legislation and adopted by states, replacing the former Single State Registration System (SSRS). Motor carriers, motor private carriers, freight forwarders, leasing companies, and brokers that operate in interstate or international commerce in the United States must register under the UCR program through their participating state.

High Priority – Commercial Motor Vehicle (HP-CMV)

The High Priority CMV grant provides financial assistance to carry out high priority activities and projects that improve CMV safety. The program aims to increase compliance with CMV safety regulations and increase public awareness about CMV safety, along with providing education and outreach on CMV safety related issues. The program also has a goal to demonstrate new safety related technologies and reduce the number and rate of crashes involving CMVs.

High Priority – Innovative Technology Deployment (HP-ITD)

Formerly known as Commercial Vehicle Information Systems and Networks, the HP-ITD grant provides financial assistance to integrate systems to improve accuracy, integrity, and verifiability of credentials. The program aims to improve efficiency through electronic screening of CMVs and enabling online application and issuance of credentials. Funds are provided to advance the technological capability and promote the deployment of intelligent transportation system applications. It includes real-time sharing of CMV safety data between FMCSA and CVISN states, online permitting, and electronic safety and credential screening of CMVs.

Motor Carrier Safety Assistance Program – Basic and Incentive (MCSAP-B&I)

MCSAP Basic and Incentive is a coordinated and uniform program of inspections and enforcement activities related to intrastate and interstate commercial vehicles and drivers. This program allows for compliance checks of drivers and vehicles operating on public roadways. Coordinated efforts between state and industry helps reduce fatalities, injuries, property damage, and hazardous material incidents.

Motor Carrier Safety Assistance Program – Border Enforcement (MCSAP-BE)

The BE program provides financial assistance to a state that shares a land border with another country. BE funds are utilized to ensure motor carriers operating cargo and passenger-carrying CMVs entering the United States from a foreign country are in compliance with commercial vehicle safety standards and regulations, financial responsibility regulations and registration requirements of the United States, and to ensure drivers of those vehicles are qualified and properly licensed to operate a CMV. The BE program is intended to enhance a state's existing MCSAP initiatives.

Motor Carrier Safety Assistance Program – New Entrant (MCSAP-NE)

The NE program provides financial assistance to reduce the number and severity of crashes, injuries and fatalities involving CMVs by reviewing new interstate motor carriers to ensure that they have effective safety management programs.

Performance and Registration Information Systems Management (PRISM) Program

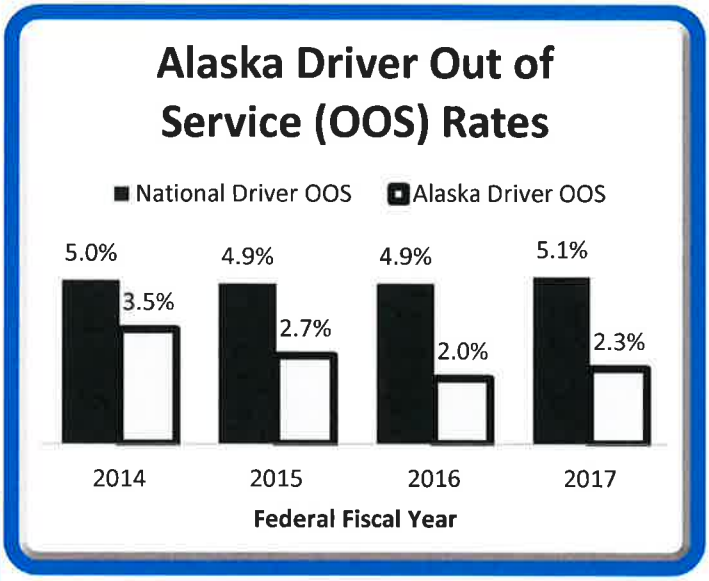
The Performance and Registration Information Systems Management (PRISM) program links Federal Motor Carrier Safety information systems with states' commercial vehicle registration and licensing systems and enables states to (1) determine the safety fitness of a motor carrier or registrant when licensing or registering the applicant of a motor carrier or while the license or registration is in effect; and (2) deny, suspend, or revoke the commercial motor vehicle registrations of a motor carrier or registrant that has been issued an out-of-service order by FMCSA.

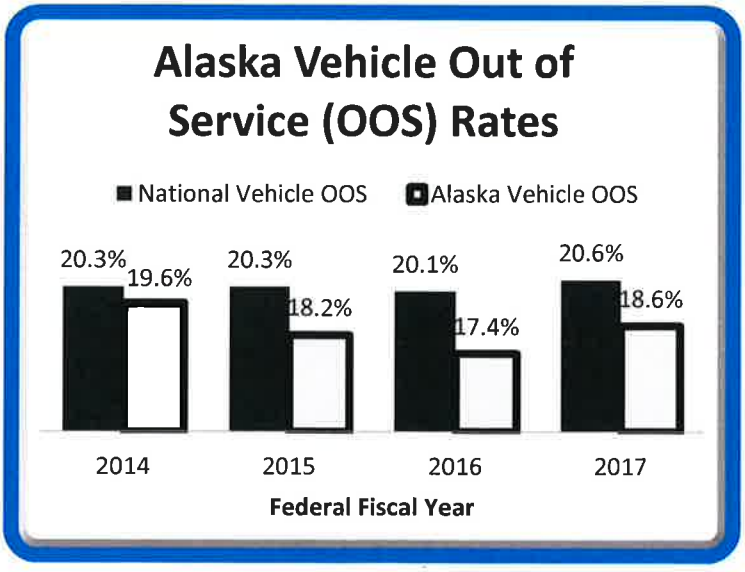
Safety Data Improvement (SaDIP) Grant Program

The SaDIP grant program provides funding to states for activities to improve the accuracy, timeliness, and completeness of safety data including, but not limited to, cargo and passenger-carrying CMV crash data, roadside inspection/enforcement, driver citation, and registration data. These funds are used to purchase equipment, train law enforcement officers in collecting crash and inspection data, enter crash data into a repository, and revise outdated crash report forms. After 2017 this grant will be contained in MCSAP.

CMV Safety in Alaska (Out of Service Rates)

One measurement of the overall safety of commercial motor vehicle traffic is the Out of Service (OOS) rate. Consistent enforcement and education can improve carrier and driver behaviors. The safety inspection program helps drivers and carriers comply with state and federal safety regulations, thereby reducing driver and vehicle OOS rates. Removing drivers from the road for unsafe or fatigued driving and/or controlled substance violations reduces the risk of crashes.





Fatalities in Alaska are relatively rare events, so MSCVE utilizes a combination of the reduction of CMV crashes and OOS rates to measure the safety of CMV traffic.

Through repeated inspections and educational outreach the statewide driver OOS rate has been reduced from 3.5% in FY2014 to 2.3% in FY2017, as seen on the above figure. In comparison, the statewide vehicle OOS rate decreased from 19.6% in FY2014 to 18.6% in FY2017 as seen on the figure to the left. Alaska consistently remains lower than the national average for driver OOS rates and vehicle OOS rates. The reduction in driver OOS rates and vehicle OOS rates indicates a higher level of compliance. By conducting roadside deployments we are able to see new truck populations that would otherwise go uninspected. In 2017 55 total deployments were conducted, including 14 rural

road deployments, which can help explain the slight increase in vehicle and driver OOS rates from 2016 to 2017.

Alaska CMV Inspection Program

MSCVE officers are Department of Transportation & Public Facilities employees authorized to enforce permits, size and weight regulations, and commercial vehicle safety. The Alaska Department of Public Safety has issued Special Commissions for all commercial vehicle enforcement officers. As the Lead Agency, MSCVE has the authority to stop for size and weigh checks, inspect vehicles, and, if necessary, temporarily issue an out-of-service order or issue a stop movement order if the vehicle or the driver is not in compliance. The Alaska commercial vehicle size, weight, and permit regulations are contained in 17 AAC Chapter 25.

To standardize safety inspections within Alaska, the Federal Motor Carrier Safety Administration (FMCSA) North American Standard (NAS) Inspection Levels are utilized.

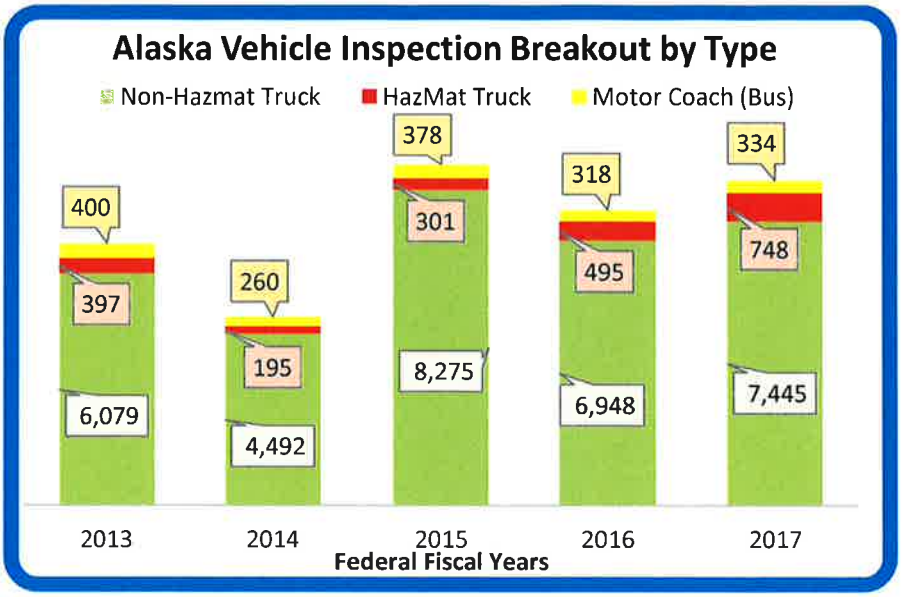
- Level I (Full Inspection)
- Level II (Walk-Around Vehicle and Driver Inspection)
- Level III (Driver/Credential Inspection)
- Level IV (Special Inspection)
- Level V (Vehicle-Only or Carrier Terminal Inspection)

As seen in the following table, during FY2017, a total of 8,527 CMV safety inspections were conducted by CVEOs. The total safety inspections that were conducted during FY2017 are broken down by the inspection level in the table. Based on the five-year average (FY2013-FY2017) the number of safety inspections completed during FY2017 is above average. However, safety inspections that were conducted at III (Driver Inspection) and IV (Special Inspection) were below the average.

NAS Inspection Level	2013	2014	2015	2016	2017	Five Year Average
I	1,686	1,437	2,021	2,193	2,788	2,025
II	1,380	785	2,014	2,098	2,219	1,699
III	3,473	2,499	4,688	3,234	3,231	3,425
IV	104	95	129	20	25	75
V	233	131	101	216	264	189
Grand Total	6,876	4,947	8,952	7,761	8,527	7,413

The number of motor coach[1], Hazardous Material (HazMat), and non-HazMat truck inspections increased in FY2017 as seen in the figure below. As a result of statewide enforcement efforts, 1,023 unsafe cargo-carrying CMVs and 6 unsafe passenger carrying CMVs were removed from the road. Through the safety inspector program, MSCVE identified 181 unqualified cargo carrying CMV drivers and 3 unqualified passenger carrying CMV drivers during FY2017.

[1] For the purpose of this Annual Report, the terms motor coach and bus have the same meaning. However, it is important to note that MSCVE only has authority to enforce upon tour and charter buses, not transit or school buses.



Roadside Enforcement

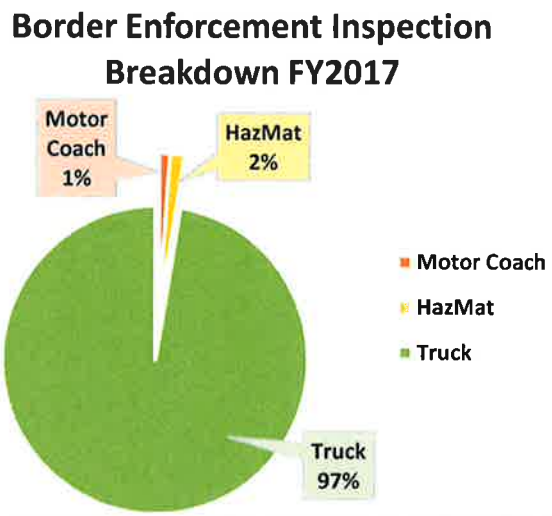
CVEOs work away from weigh stations to address concerns of noncompliance to prevent crashes and fatalities. As a part of the MCSAP High Priority Grant MSCVE conducted 55 roadside deployments. These deployments had a goal of reducing the risk of crashes by performing high visibility CMV HazMat/non-HazMat and motor coach enforcement. CVEOs conducted 12 trips to the Kenai Peninsula, 12 trips to the Haul Road, 17 trips to Denali National Park and the Matanuska-Susitna region, and 14 rural road trips throughout the state. These rural road deployments were made to the following locations: Bethel, Cordova, Delta Junction, Dutch Harbor, Glennallen, Juneau, Ketchikan, Kodiak, Nome, Prince of Wales, and Valdez.

Many rural areas of the state may not have wireless or cellular coverage; therefore, CVEOs are equipped with Alaska Land Mobile Radios (ALMR) to conduct driver license, warrant, and vehicle registration checks. When on deployment CVEOs are equipped with portable Haenni scales, as seen to the right, to conduct checks for weight compliance.

Haenni scales weighing a double axle.

Border Enforcement

Alaska shares five road border crossings with Canada. Two of these are located in Interior Alaska: at the Alcan Port-of-Entry on the Alaska Highway and Poker Creek on the Top of the World Highway. Two others are located in Southeast Alaska: the Dalton Cache station on the Haines Highway and the U.S. Border station near Skagway on the South Klondike Highway. The fifth border crossing is located on the Stewart-Hyder Access Road, located in the southeast of Alaska, geographically closer to Seattle, Washington than to Anchorage.



The portion of the Alaska Highway running from the United States/Canada border to the Tok Weigh Station is the first point of contact. It is also a major port of entry into and out of the state of Alaska for international commerce. Vehicles operating in interstate and international commerce represented about 90% of the inspections that occurred at the Tok WS in FY2017.

In FY2017, 10 motor coaches operating in foreign or domestic commerce were inspected during the summer season. Commercial vehicles carrying HazMat and operating in interstate and international commerce are also subject to the inspection program. During FY2017, 15 HazMat inspections occurred as part of border enforcement. These totals for motor coach and HazMat inspections are expressed as a percentage of the 961 total border enforcement inspections in the chart above.

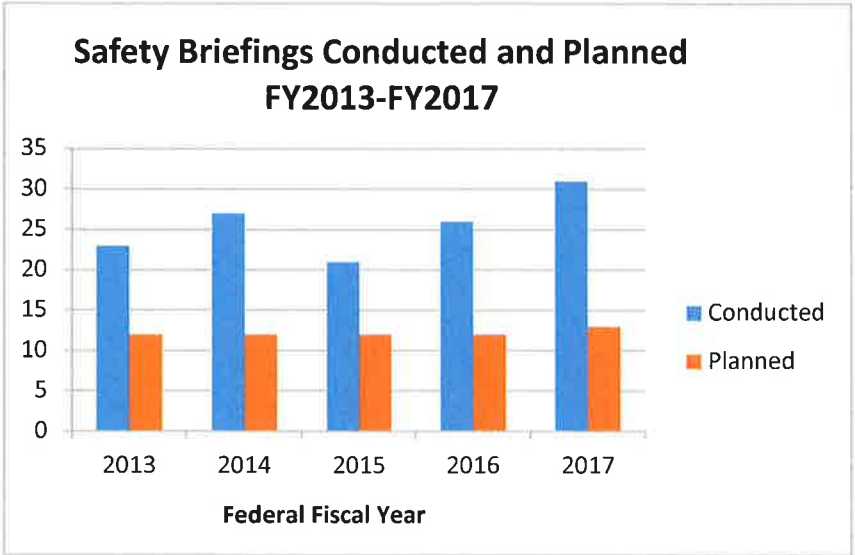
MSCVE Inspection Tools

MSCVE utilizes a Performance-Based Brake Tester (PBBT) during inspections with the intent of reducing the risk of CMV crashes due to poor or inoperable braking systems. The PBBT is a mobile dynamometer, which directly tests the braking capacity of each axle, allowing the CVEO to determine if the vehicle has adequate braking capacity for a given vehicle weight.

The PBBT at the Glenn Outbound weigh/inspection facility

Educational Outreach

Outreach efforts improve the CMV awareness of highway users that attend offered events to minimize the risk of a crash with a CMV, and the resulting injury and/or fatality. The fundamental strategy is to raise safety awareness about sharing the road with CMVs. MSCVE continues working with stakeholders interested in commercial vehicle safety to develop and deploy new avenues of timely information and effective outreach. In FY2017, there were 31 safety briefings conducted throughout the state, an increase from the 26 completed in FY2016.



Future Updates

The Unified Carrier Registration System (URS) is a new streamlined online system that will simplify the FMCSA registration process. New USDOT Number Applicants must use the new Unified Registration System (URS) online registration process. FMCSA is extending the implementation date of the final state of the URS beyond January 14, 2017 because additional time is needed to securely migrate data into a new database and to conduct further compatibility testing with its state partners. UCR fees have been decreased from 2017 to 2018. The proposed UCR fee schedule is as follows: The Shared Services organizational structure provides back-office support for common administrative functions, allowing agencies to focus more closely on core mission responsibilities. The Shared Services organization model may increase the quality and speed of service delivery, and increase client satisfaction while decreasing the overall cost to the State of Alaska. This is achieved through a business structure focused on continuous process improvement that includes standardizing business processes and improving transaction cycle-times. It is anticipated that an initial ten percent savings can be realized in FY2018 for these activities, with increased savings in future fiscal years. This is scheduled to occur sometime next year.

Power Units	0-2	3-5	6-20	21-100	101-1,000	1,001+
Fee	$69	$206	$410	$1,431	$6,820	$66,597

Commercial Vehicle Enforcement – Size and Weight Compliance

Division inspection efforts continue to focus on maintaining a high level of compliance at fixed inspection/weigh stations and improving compliance at roadside inspection sites. Size

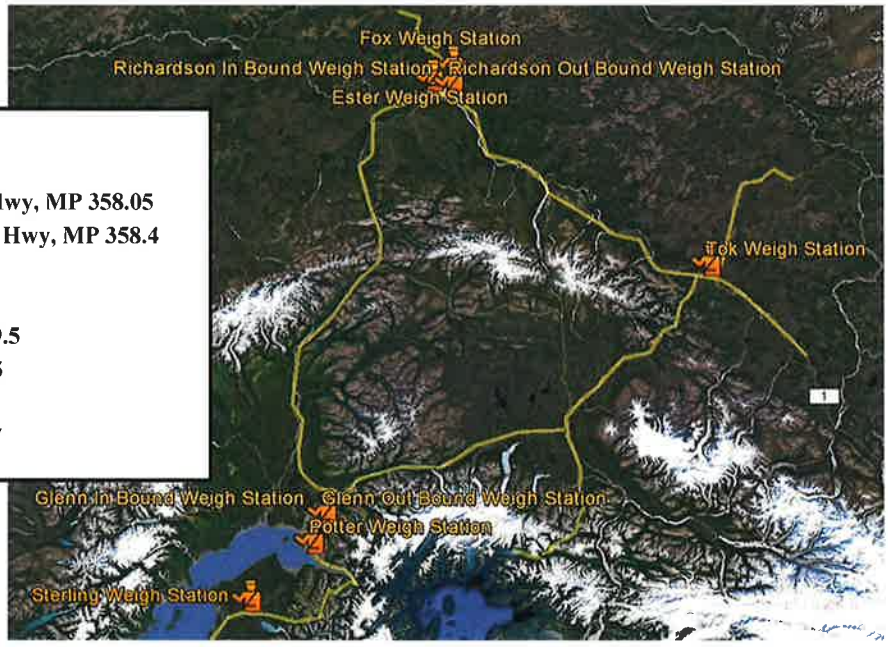
and weight inspection efforts focus on identifying and correcting non-compliant oversize and overweight vehicles as both have negative impacts on highway safety and public infrastructure, including roads and bridges. The SFY2017 weight compliance rate was 98.8%, just over the goal of 98.0%.

Fixed inspection/weigh stations have designated areas for inspection of a commercial motor vehicle and driver credentials. Fixed scales, equipped to measure axle group weight and gross vehicle weight, are installed at all of these facilities statewide. The locations of the fixed inspection/weigh stations in the state generally do not allow large commercial vehicles to take alternate routes and bypass the facility.

As represented in the image on the previous page, all Alaska fixed inspection/weigh stations are located on the National Highway System. During SFY2017, MSCVE weighed 64,097 CMVs at the fixed inspection/weigh stations listed in the upper left portion of the image. Portable weigh scales are used at roadside locations by CVEOs.

Inspection/Weigh Stations

- **Fox - Steese Highway, MP 11.2**
- **Richardson Inbound – Richardson Hwy, MP 358.05**
- **Richardson Outbound – Richardson Hwy, MP 358.4**
- **Ester - Parks Highway, MP 313.61**
- **Tok - Alaska Highway, MP 1308**
- **Glenn Outbound - Glenn Hwy, MP 9.5**
- **Glenn Inbound - Glenn Hwy, MP 9.5**
- **Potter - Seward Highway, MP 113.7**
- **Sterling - Sterling Highway, MP 82.7**



Innovative Technology Deployment (Formerly CVISN)

The Innovative Technology Deployment (ITD) program helps improve commercial motor vehicle safety by:

- focusing safety enforcement on high-risk operators
- integrating systems to improve the accuracy, integrity, and verifiability of credentials
- improving efficiency through electronic screening of commercial vehicles

ITD refers to the information systems that support local CVE activities. Systems that support CVE activities consist of the following components:

- Weigh in Motion (WIM) sites – A WIM site allows the weight of a vehicle to be screened while maintaining traffic flow. WIM sites are used to measure approximate axle weights as a vehicle moves across sensors in the pavement, and to determine the gross vehicle weight and classification based on the axle weights and spacing's. These devices provide data that helps MSCVE study the traffic patterns of CMVs for the efficient deployment of enforcement

personnel. During FY2017, nearly 1.65 million CMVs (class 5-13 vehicles) crossed over established WIMs within the state.

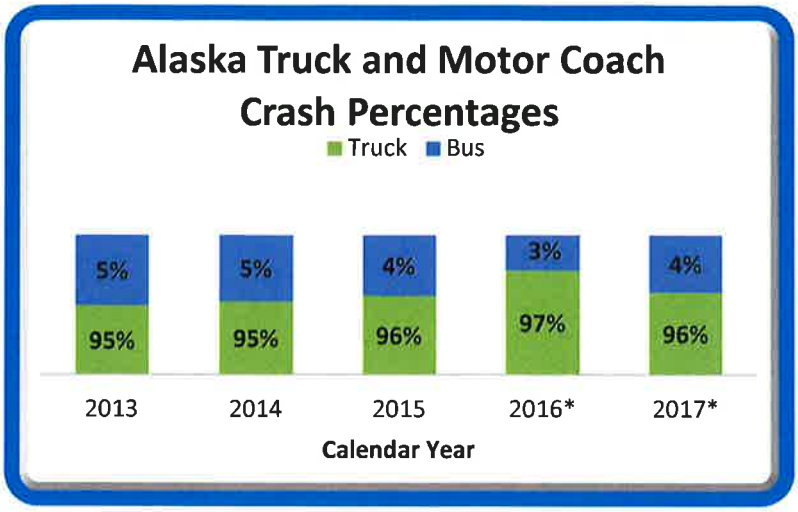
- Virtual Weigh Station (VWS) – A VWS is comprised of additional components in addition to a WIM to allow the weight of a vehicle to be transmitted to a location, fixed or mobile, for screening purposes while maintaining traffic flow. These components include cameras to capture images of CMVs passing over the WIM, and software and hardware to transmit the image and weight data to either fixed inspection/weigh stations or a web location. Currently, VWSs are at the Port of Anchorage (transponder reader pictured above), the Sterling Highway, and the Glenn Highway. Data from the Glenn Highway WIM, Automated Vehicle Identification (AVI), and Video Identification (VID) are transmitted to the nearby weigh stations for the purpose of prescreening the weight compliance of vehicles.

- Sorting system – This system adds to the VWS through the use of transponders, provided free of charge in Alaska, which may allow compliant vehicles to bypass an open weigh station. A sorting system is active at the Outbound Glenn Highway weigh station (pictured to the right). In addition to cost savings to the industry, the reduction in CMV idling emissions reduces the carbon footprint of the fixed inspection/weigh station.

Commercial Vehicle Enforcement – Crash Reporting

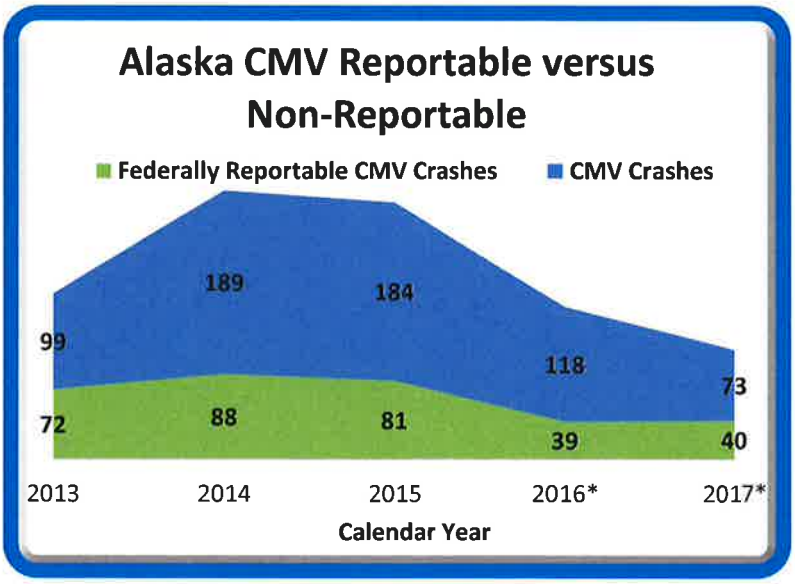
The downward trend in CMV crashes in Alaska mirrors the nationwide trend. Alaska's efforts to reduce crashes and their causes have resulted in a goal consistent with the *FMCSA CMV Fatality Reduction Goal* of 0.114 fatalities per 100M total Vehicle Miles Traveled (VMT). In the FY2017 Alaska Commercial Vehicle Safety Plan (CVSP) the goal was to reduce the number of federally-reportable CMV-related crashes below the three-year average of 96. A federally-reportable crash is one that results in: any vehicle being disabled as a result of the crash and requiring a tow; an injury as a result of the crash, requiring immediate transportation for treatment away from the scene; or a fatality. The graph below, displaying the total CMV crashes, injuries, and fatalities, is intended to illustrate the general downward trend. The image on the left was taken outside of Valdez after a HazMat tanker left the roadway and rolled.

Fuel being offloaded from a pup trailer after a tanker crash. (Photo by ADEC)



Motor coaches are vital modes of transportation for the Alaskan tourism industry and the general public. Unlike large cargo-carrying CMVs, motor coaches generally have many passengers on board. In the past five years, approximately 3.9% of CMV crashes in the state have involved a motor coach. Crashes involving motor coach operations are a national focus, and enforcement operations are focused on minimizing crashes related to motor coaches.

As seen on the figure below, in CY2017 there were 73 CMV crashes. Of those 73 crashes, 40 were considered federally-reportable. These were entered into SAFETYNET, a state-utilized federal database, and then uploaded to the Motor Carrier Management Information System (MCMIS). The remaining 33 CMV crashes had minimal, if any, personal, property or vehicle damage.

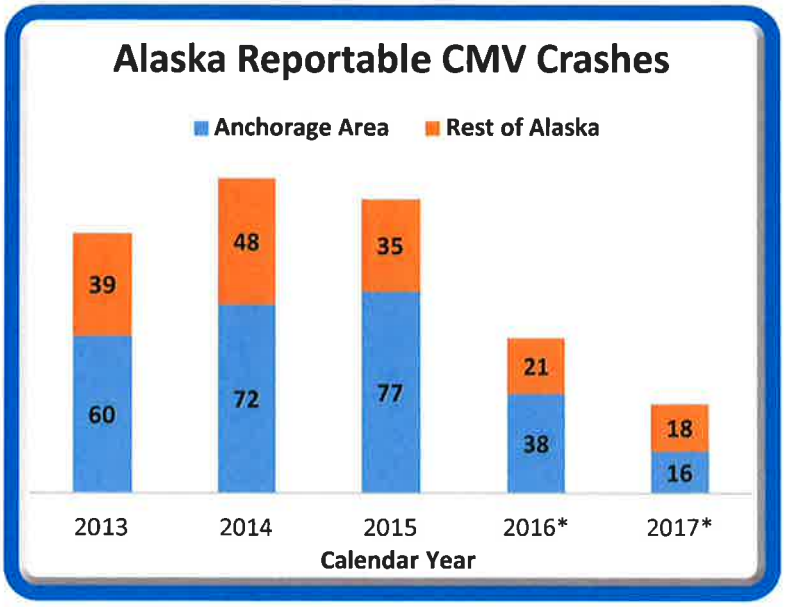


DOT&PF has a newly created Crash Data Repository (CDR) that will be used by MSCVE instead of relying on the mailing and emailing of crash reports to improve crash reporting. Full implementation of CDR electronic crash-data sharing and mapping is expected in FY2018.

**Preliminary data*

Anchorage and Surrounding Area Crash Reduction

MSCVE's FY2017 CVSP state specific objective was to reduce CMV crashes occurring in Anchorage and its surrounding area. The surrounding area is defined as being bounded by MP 77 Parks Hwy (Willow), MP 62 Glenn Hwy (Sutton), and MP 75 Seward Hwy (Turnagain Pass). This area houses roughly one-half of the state's population and hosts the majority of CMV traffic moving within and through the region.



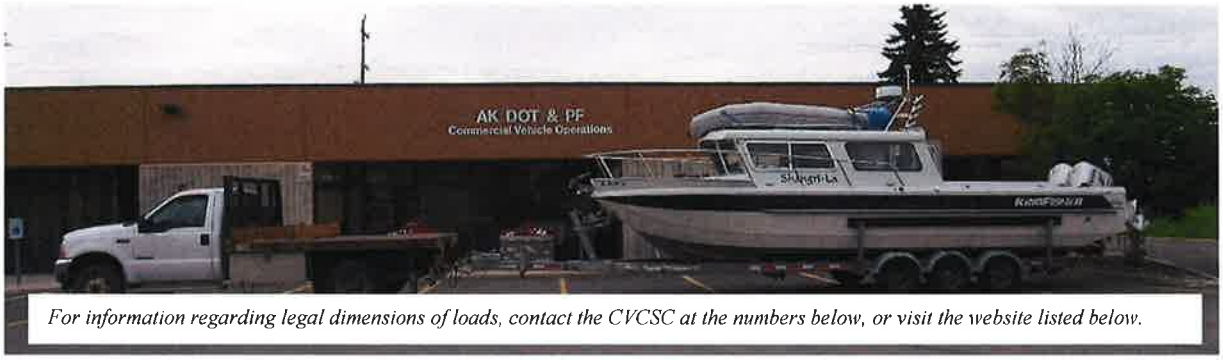
Crashes involving CMVs and the resulting deaths, injuries, and damages take a tremendous toll on society. During CY2013-2017, an average of 85 federally-reportable crashes involving CMVs occurred each year throughout the state. Of these, 62% occurred in Anchorage and the surrounding area.

During FY2017, MSCVE's efforts included conducting 2,761 inspections (32.4% of all inspections) in Anchorage and the surrounding area. These inspections resulted in removing 440 unsafe vehicles and 67 unqualified drivers from the road. The out-of-service rates for vehicles (21.1%) and drivers (2.5%) are higher than the statewide out-of-service rates, 18.6% for vehicles and 2.25% for drivers.

**Preliminary data*

Commercial Vehicle Enforcement – Customer Service Center

The Commercial Vehicle Customer Service Center's (CVCSC) objective is to protect Alaska's highway infrastructure by regulating the transport of oversize and overweight loads. Without a permit detailing specific routes any oversize motor vehicle could damage infrastructure. The image to the right, taken in 2017, shows an example of a vehicle striking a support of a bridge over the Kuzitrin River near Nome. The professional staff of the CVCSC can interpret road and bridge restrictions and may issue permits to allow movement of an oversize or overweight load in Alaska. This helps preserve infrastructure, including both roads and bridges, by detailing specific acceptable routes. A permit for travel on public roads is required for commercial and non-commercial vehicles if a size or weight limit is exceeded.



For information regarding legal dimensions of loads, contact the CVCSC at the numbers below, or visit the website listed below.

(800) 478-7636 or (907) 365-1200

Website: http://dot.alaska.gov/mscve/index.cfm?go=mscve.permits

Roads in Alaska are subject to extreme conditions, including: repeated freeze and thaw cycles, heavy loads, and seasonal use of studded tires. During the spring and summer months, typically March through June, roadway weight restrictions are used in an effort to reduce damage to the road system. This is accomplished by reducing certain allowable axle weights. Weight restrictions notices can be found on MSCVE's Web site at:

http://dot.alaska.gov/mscve/index.cfm?go=mscve.weightrestrictions

In SFY2017, the CVCSC issued 17,073 oversize and/or overweight permits. Permits were obtained at the MSCVE office and on-line. Online permits are available for limited over-dimensional and overweight loads up to 125%. A permit manual is available to assist in the process. An additional 9,598 temporary truck/trailer registration (TRT) permits were processed. TRT permits were obtained at the Tok Port of Entry, Tok DMV, and online at *my.alaska.gov*.

Staff assists commercial vehicle owners:

- Obtain information for a FREE transponder (electronic by-passing of participating weigh stations)
- Update the federal MCS-150 form for vehicle PRISM registration
  (At the time of this printing, this service is available at no charge)
- Process annual Unified Carrier Registration (UCR) payments
  (At the time of this printing, this service is available at no charge)

Commercial Vehicle Enforcement – Information and Contacts

The Commercial Vehicle Enforcement website is designed to be a "One Stop" portal to most questions and concerns.

http://dot.alaska.gov/mscve/index.cfm?go=mscve.phones

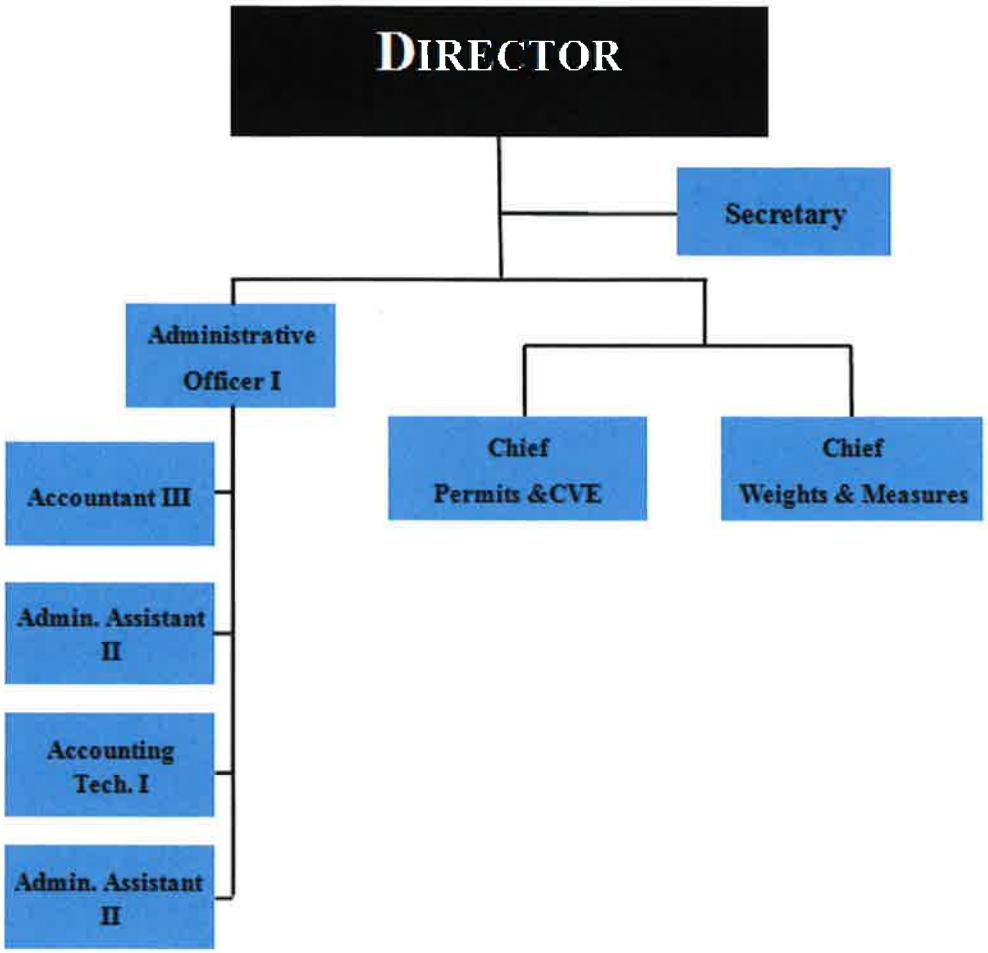
Commercial Vehicle Enforcement

City	*Name*	*Title*	*Phone*	*Fax*	*Email*
Anchorage	Dan Byrd	Chief, Permits & CVE	907-365-1210	907-365-1220	daniel.byrd@alaska.gov
Anchorage	Jess Seward	Statewide Supervisor	907-365-1213	907-365-1220	jess.seward@alaska.gov
Anchorage	Katherine Hensley	Program Coordinator II	907-365-1215	907-365-1220	katherine.hensley@alaska.gov
Anchorage	Customer Service Center		907-365-1200 800-478-7636	907-365-1221 866-345-2641	dot.dms.permitsfax@alaska.gov

Weigh Stations - Statewide

City	*Name*	*Title*	*Phone*	*Fax*	*Email*
Anchorage	Michael Rogers	Anchorage Area Supervisor	907-428-2020	907-428-2199	michael.rogers@alaska.gov
Fairbanks	Carlos Rojas	Fairbanks Area Supervisor	907-322-1865	907-451-5498	carlos.rojas@alaska.gov
Tok	Stephen Brooks	Tok Area Supervisor	907-883-3729	907-883-4318	stephen.brooks@alaska.gov
Glenn O/B Weigh Station			907-428-1333		
Glenn I/B Weigh Station			907-428-2064		
Potter Marsh Weigh Station			907-345-1184		
Sterling Weigh Station			907-262-5400		
Ester Weigh Station			907-479-5087		
Fox Weigh Station			907-457-8505		
Richardson O/B Weigh Station			907-451-1694		
Richardson I/B Weigh Station			907-451-5460		
Tok Weigh Station			907-883-4591	907-883-4318	

Appendix A – Top Level Organizational Chart



As of February 12, 2018

Statutory and Regulatory Authority

AS 45.75 Weights and Measures Act

AS 19.10.060 Size, Weight, and Load Provisions; Restriction on use of Highways; Commercial Vehicle Inspection Program

AS 19.10.300 Financial Responsibility (Commercial Motor Vehicle)

AS 19.10.310 Commercial Motor Vehicle Safety Inspections

17 AAC 25 Truck Size, Weight and Safety Regulations

17 AAC 28 Buses

17 AAC 90 Specifications, Tolerances, and Regulations for Weighing and Measuring Devices

Appendix B – Summary of Major Accomplishments in 2017

Measurement Standards (SFY2017)

Retail Items	
Price Accuracy Checks	6,500 items
% with errors	1.5%
Inspections	
Device Inspections	14,493 inspections

Commercial Vehicle Enforcement (FY2017)

Safety Inspections	
Total Number Inspected	8,527 inspections
Motor Coach (Bus) Inspected	334 inspections
HazMat Inspected	748 inspections
Unsafe Vehicles Removed	1,029 vehicles placed out-of-service
Unsafe Drivers Removed	184 drivers placed out-of-service
Safety Violations	
Total Safety Violations	8,978 safety violations
Vehicle-related	7,205 safety violations
Driver-related	1,669 safety violations
HazMat-related	104 safety violations
Size & Weight	
% of weight compliance	98.8% (SFY2017)
Weigh Station Counts	64,097 vehicles
Weigh-in-Motion Counts	1,648,430 vehicles
Portable Scales	255 vehicles

Commercial Vehicle Customer Service Center (SFY2017)

Permits	
Total Permits	17,073 permits
TRT	9,598 permits

MSCVE Contact Information

Daniel V. Smith, Director

State of Alaska,
Department of Transportation and Public Facilities,
Division of Measurement Standards and Commercial Vehicle Enforcement
11900 Industry Way
Building M, Suite 2
Anchorage, AK 99515

Phone: (907) 365-1210
Fax: (907) 365-1220

Website: www.dot.alaska.gov/mscve

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Matthew Matta – Maxwell PDL Lodging
Ray Woolfolk - MSCVE

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